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ABSTRACT

The National Student Service-Learning and Community Service Survey was conducted in spring 1999 to determine the percentage of public K-12 schools that incorporate service learning into their course curriculum. Some of the findings of the study are the following: (1) 64 percent of public schools, including 83 percent of high schools, had students participating in community service activities recognized by or arranged through the school; (2) 57 percent of public schools organized community service activities for their students; (3) 32 percent organized service learning as part of their curriculum, including almost half of high schools; (4) schools with service learning tended to have grade-wide service learning, service learning in individual courses, or discipline-wide service learning; (5) 83 percent of schools with service learning offered some type of support to teachers interested in integrated service learning into the curriculum, with most providing support for service-learning training; and (6) most schools with service learning cited strengthening relationships among students, the school, and the community as key reasons for practicing service learning. (KC)

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Service-Learning and Community Service in K–12 Public Schools

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Summary of Key Findings

The National Center for Education Statistics (NCES) of the U.S. Department of Education used the Fast Response Survey System (FRSS) to conduct the *National Student Service-Learning and Community Service Survey* in spring 1999. This is the first survey to provide reliable national estimates of the percentage of public elementary, middle, and high[1] schools incorporating service-learning into their course curriculum, as well as providing the most recent data on school engagement in community service. The survey found that:

- Sixty-four percent of all public schools, including 83 percent of public high schools, had students participating in community service activities recognized by and/or arranged through the school;
- Fifty-seven percent of all public schools organized community service activities for their students;
- Thirty-two percent of all public schools organized service-learning as part of their curriculum, including nearly half of all high schools;
- Schools with service-learning tended to have grade-wide service-learning, service-learning in individual courses that were not part of a broader grade or school-wide initiative, or discipline-wide service-learning programs;
- Eighty-three percent of schools with service-learning offered some type of support to teachers interested in integrated service-learning into the curriculum, with most providing support for service-learning training or conferences outside of school; and
- Most schools with service-learning cited strengthening relationships among students, the school, and the community as key reasons for practicing service-learning.

[1] High schools include high schools and combined schools. Combined schools are schools that contain both elementary and secondary grades. The highest grade in these schools must be at least 9th grade.

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Background

Incorporating service-learning into K-12 schools is a growing area of interest to educators. Like community service, service-learning requires students to serve their communities. However, service-learning takes community service one step further by incorporating the service experiences of students directly into their school work. Service-learning has long been viewed as a possible means of improving education, with roots stretching back to late-19th- and early 20th-century. For example, John Dewey, an advocate of service-learning, believed that students would learn more effectively and become better citizens if they engaged in service to the community and had this service incorporated into their academic curriculum (Dewey, 1916). Though first suggested over a century ago, the incorporation of service-learning into the curriculum did not begin in earnest until the early 1970s, and it has only been in the last decade that extensive reform efforts have emerged.

Legislative reform over the past 10 years has set in motion a growing national emphasis on increasing students' involvement with their local communities and linking this service to academic study through service-learning. The National and Community Service Act of 1990, through the Serve America program, and the National and Community Service Trust Act of 1993, through the Learn and Serve America program, provided support for service-learning activities in elementary and secondary schools (Corporation for National Service, 1999). In addition, through programs such as AmeriCorps, the federal government has offered opportunities to high school graduates, college students, and recent college graduates to serve local communities in exchange for stipends and payment of education loans or money toward future postsecondary education. Both Learn and Serve America and AmeriCorps are administered by the Corporation for National Service, a federal organization also created by the National and Community Service Trust Act of 1993.

Two previous studies, one looking at high schools in 1984 and the other looking at 6-12 grade students in 1996, provide tentative evidence that service-learning has become more pervasive since the early 1980s. Based on a study conducted in 1984, researchers reported that 27 percent of all high schools (public and private) in the United States offered some type of community service and 9 percent of all high schools offered service-learning, defined as curriculum-related service programs (Newmann and Rutter, 1985). The 1996 National Household Education Survey (NHES), conducted by NCES, found that 49 percent of all students in grades 6 - 12 participated in community service (U.S. Department of Education, 1997). Of the students participating in community service, 56 percent reported that their community service was incorporated into the curriculum in some way.

Definitions

The definition of service-learning employed for this study differs from definitions of service-learning used on past surveys. This is not unusual, as noted by the University of Colorado, a leader in the collection and promotion of information about service-learning: "Definitions of service-learning vary considerably among those who embrace it" (University of Colorado, 1998). Kraft (1996) presents a similar argument in his discussion of the practice of service-learning. He states that some agreement has been achieved on the definition of service-learning in recent years, but that practices do not always match the definition. For these reasons, specific definitions of community service and service-learning were developed in cooperation with the Corporation for National Service for use on the *National Student Service-Learning and Community Service Survey*. The following definitions were provided to respondents to help clarify the definitions of both terms:

- **Community service.** For the purposes of this survey, student community service is defined as community service activities that are non-curriculum-based and are

recognized by and/or arranged through the school. The community service:

- May be mandatory or voluntary;
- Generally does not include explicit learning objectives or organized reflection or critical analysis activities; and
- May include activities that take place off of school grounds or may happen primarily within the school.

Community service activities may be carried out as school-wide events, separately organized school programs, or projects conducted by school-sponsored clubs (e.g., Girls/Boys Clubs, National Honor Society). Examples of service activities could include cleaning up a local park, visiting the elderly, or collecting and distributing food to those in need.

- **Service-learning.** For the purposes of this survey, service-learning is defined as curriculum-based community service that integrates classroom instruction with community service activities. The service must:
  - Be organized in relation to an academic course or curriculum;
  - Have clearly stated learning objectives;
  - Address real community needs in a sustained manner over a period of time; and
  - Assist students in drawing lessons from the service through regularly scheduled, organized reflection or critical analysis activities, such as classroom discussions, presentations, or directed writing.

  Example of service-learning: Students in a middle school science class studying the environment help preserve the natural habitat of animals living at a local lake. Through classroom studies, the students learn about the environment. The students keep the area around the lake clean, post signs providing information to the public, and study soil and water composition as well as the impact of industrial development on wildlife. Throughout the project, students write about their experiences in journals and participate in class discussions about the project and its effect on their lives and the local community.

These definitions appeared on the cover page of the survey and were incorporated into questions that asked if the school had students participating in community service (question 1) and/or had students participating in service-learning (question 6). Some schools may have interpreted the definition of service-learning more loosely than as stated. In addition, some states, school districts, and schools supporting community service and/or service-learning have established definitions different from the ones used for the survey. This may have created confusion for respondents who have become accustomed to labeling the service activities in their school as either community service or service-learning. They may have inadvertently disregarded the definitions established for this survey in favor of the definitions they have been using. In cases where response inconsistencies were noted, followup calls were made to the schools to resolve those issues. On the basis of their responses, it was determined that the majority of schools that reported having students participating in some form of service-learning did have students participating in curriculum-related service activities distinct from community service.

About the Survey

After nearly a decade of emphasis on increasing student involvement in service activities, measuring the extent to which service-learning and community service occur in K-12 public schools is an important step in assessing its overall effect. The *National Student Service-Learning and Community Service Survey* was designed to meet this need for data, focusing

particularly on service-learning. This report seeks to answer several important questions:

- What percentage of schools have students participating in community service?
- What percentage of schools organize community service activities for students?
- What percentage of schools have students participating in service-learning?
- In what ways are schools implementing service-learning?
- What types of support are available for teachers interested in integrating service-learning into their course curriculum?
- What are schools' main reasons for encouraging student participation in service-learning?
- What special grants or special funding are available to support service-learning or community service?

Prior to this survey, there were no reliable national data available to indicate the prevalence of service-learning in elementary or middle schools. It was assumed, based on very limited information, that the percentage of elementary schools with service-learning was negligible, and that the percentage of middle schools with service-learning was low. Consequently, a sample was drawn that included disproportionately more high schools than elementary or middle schools. It turns out, however, that significant numbers of elementary and middle schools are engaged in service-learning. Thus, while the sample is nationally representative and unbiased, the design is statistically inefficient for some overall estimates that include all three instructional levels (elementary, middle, and high). Therefore, while reported differences between subgroups may appear to be large, the large standard errors render the apparent differences not statistically significant. For example, while differences between schools with students participating in community service activities based on percentage of minority enrollment may appear to be large, none of the comparisons are statistically significant.

Data have been weighted to national estimates of regular public schools. All comparative statements made in this report have been tested for statistical significance through chi-squared tests or t-tests adjusted for multiple comparisons using the Bonferroni adjustment and are significant at the .05 level or better.

Community Service

Overall, 64 percent of all public schools in the United States had students participating in community service activities recognized by and/or arranged through the school. A higher percentage of high schools (83 percent) than elementary schools (55 percent) or middle schools (77 percent) had students engaged in community service activities (table 1). Middle schools were also more likely to have students participating in community service activities than were elementary schools. There were also differences in community service participation by school size, with larger schools (i.e., those enrolling 1,000 or more students) more likely to have students participating in community service activities than schools with lower enrollments.

Schools' use of community service also varied by the economic background of students. Using the Title I threshold for schools that qualify as schoolwide Title I programs (U.S. Department of Education, 1999), schools where 50 percent or more of the student body were eligible for free or reduced-price lunch were compared to those where fewer students qualified. Schools with less than 50 percent of their students eligible for free or reduced-price lunch were more likely to have students participating in community service activities than those that had higher percentages of students eligible for free or reduced-price lunch.

Table 1.—Percent of public schools that have students participating in community service, arrange community service opportunities for students, and have students participating in service-learning, by school characteristics: Academic year 1998-1999

School characteristic	Weighted N	Percent with community service		Percent organizing community service activities		Percent with service-learning	
		Percent	Standard error	Percent	Standard error	Percent	Standard error
All public schools	79,750	64	2.6	57	2.8	32	2.0
Instructional level							
Elementary	49,350	55	4.0	49	4.3	25	2.9
Middle	14,398	77	2.2	71	2.2	38	2.6
High*	16,002	83	1.3	71	2.2	46	1.9
Size of enrollment							
Less than 300	19,842	59	5.6	53	5.8	27	4.4
300 to 999	51,876	65	3.0	57	3.2	31	2.7
1,000 or more	8,022	77	4.1	69	3.9	48	3.1
Type of locale							
City	20,742	66	5.0	61	5.0	36	4.2
Urban fringe	26,579	63	4.0	57	4.1	27	2.9
Town	11,614	65	5.7	59	5.7	43	6.1
Rural	20,814	64	4.7	53	4.7	27	3.8
Geographic region							
Northeast	16,121	67	6.2	64	6.2	30	4.8
Southeast	15,927	63	5.5	56	5.5	35	4.7
Central	22,442	67	4.7	58	5.6	32	4.1
West	25,259	61	4.4	53	4.5	30	3.8
Percent minority enrollment							
Less than 6 percent	25,925	67	4.1	58	4.6	31	4.0
6 to 20 percent	16,965	65	5.4	56	5.3	31	4.4
21 to 49 percent	18,208	72	5.1	67	5.2	36	4.5
50 percent or more	17,798	54	5.1	50	5.0	29	4.0
Percent of students eligible for free or reduced-price lunch							
Less than 50 percent	50,975	69	2.8	63	3.2	36	2.6
50 percent or more	15,409	50	5.9	43	5.7	23	4.5

*High schools include high schools and combined schools. Combined schools are schools that contain both elementary and secondary grades. The highest grade in these schools must be at least 9th grade.

NOTE: In some cases, detail weighted N do not sum to the population total due to rounding or missing data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "National Student Service-Learning and Community Service Survey," FRSS 71, 1999.

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One measure of school commitment to community service activities is whether the school organizes community service activities in which students can participate. Fifty-seven percent of all public schools organized community service activities for their students (table 1). This represented 89 percent of schools whose students were participating in community service activities (not shown in table). Middle schools (71 percent; table 1) and high schools (71 percent) were more likely to organize community service activities than were elementary schools (49 percent). In addition, schools with less than 50 percent of their students eligible for free or reduced-price lunch were also more likely to organize community service activities than schools with 50 percent or more of their students eligible for free or reduced-price lunch.

Service-Learning

Service-learning in K-12 schools combines elements of community service with classroom instruction. The service performed by students must be organized in relation to the curriculum, have clearly stated learning objectives, meet real community needs, and include participant reflection or critical analysis of the service activities. The percentage of public schools nationwide with service-learning was 32 percent (table 1), which means that about half as many schools had service-learning as had community service. By instructional level, 25 percent of elementary schools, 38 percent of middle schools, and 46 percent of all high schools had students participating in service-learning.

There were also differences in the percentage of schools with service-learning based on the percentage of students eligible for free or reduced-price lunch. Schools with less than 50 percent of their students eligible for free or reduced-price lunch were more likely to have service-learning than were schools with 50 percent or more of their students eligible for free or reduced-price lunch.

Implementation of Service-Learning

Schools can implement service-learning programs in a number of different ways. They range from school-wide service learning, which involves every student in the school, to grade-wide service-learning, which involves all students in one or more grades, to service-learning as part of an individual course. Of schools with service-learning, 79 percent reported implementing service-learning in two or more ways (not shown in table). Irrespective of how service-learning is implemented, a program may be mandatory and/or voluntary in the same school. For example, a school might require that all 10th-graders participate in service-learning, while allowing students in other grades the option of participating.

Overall, 70 percent of schools with service-learning had students participating in grade-wide service-learning, where all students in one or more grades participated in a service project or program through academic coursework (table 2). Sixty-two percent of schools reported that service-learning was offered in individual academic classes that were not part of a broader grade- or school-wide initiative. Discipline-wide service-learning, that is service-learning integrated into an entire subject area through academic coursework, was utilized in 53 percent of schools. One-third of the schools with service-learning reported having school-wide service-learning during the 1998-1999 academic year.

Examining the data by instructional level reveals significant differences in the ways elementary schools and middle/high schools implemented service-learning. Elementary schools were more likely to have grade-wide or discipline-wide service-learning than were middle/high schools. At the same time, middle/ high schools were more likely than elementary schools to have service-learning in individual academic classes that were not part of a broader grade- or school-wide initiative or in separate electives or advisory periods.

Table 2.—Of public schools with service-learning, percent implementing service-learning in various ways, by instructional level: Academic year 1998-1999

Instructional level and implementation of service-learning	Any participation	
	Percent	Standard error
All schools		
Grade-wide service-learning	70	3.1
Service-learning in individual academic courses that are not part of a broader grade- or school-wide initiative	62	3.7
Discipline-wide service-learning	53	4.2
Service-learning as part of a special education program	34	3.6
School-wide service-learning	33	3.3
Service-learning as a separate elective or advisory period	29	3.3
Service-learning as part of a dropout prevention course or program	14	2.4
Elementary		
Grade-wide service-learning	88	4.8
Service-learning in individual academic courses that are not part of a broader grade- or school-wide initiative	54	7.4
Discipline-wide service-learning	62	7.7
Service-learning as part of a special education program	35	6.7
School-wide service-learning	37	7.3
Service-learning as a separate elective or advisory period	20	6.1
Service-learning as part of a dropout prevention course or program	11	4.9
Middle/high*		
Grade-wide service-learning	53	2.3
Service-learning in individual academic courses that are not part of a broader grade- or school-wide initiative	70	2.3
Discipline-wide service-learning	44	2.8
Service-learning as part of a special education program	33	2.0
School-wide service-learning	28	2.1
Service-learning as a separate elective or advisory period	38	2.3
Service-learning as part of a dropout prevention course or program	16	1.5

*High schools include high schools and combined schools. Combined schools are schools that contain both elementary and secondary grades. The highest grade in these schools must be at least 9th grade.

NOTE: Data presented in this table are based upon the number of schools having service-learning—32 percent of public schools. Percentage of schools implementing service-learning in various ways do not sum to 100 because many schools implemented service-learning in more than one way.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "National Student Service-Learning and Community Service Survey," FRSS 71, 1999.

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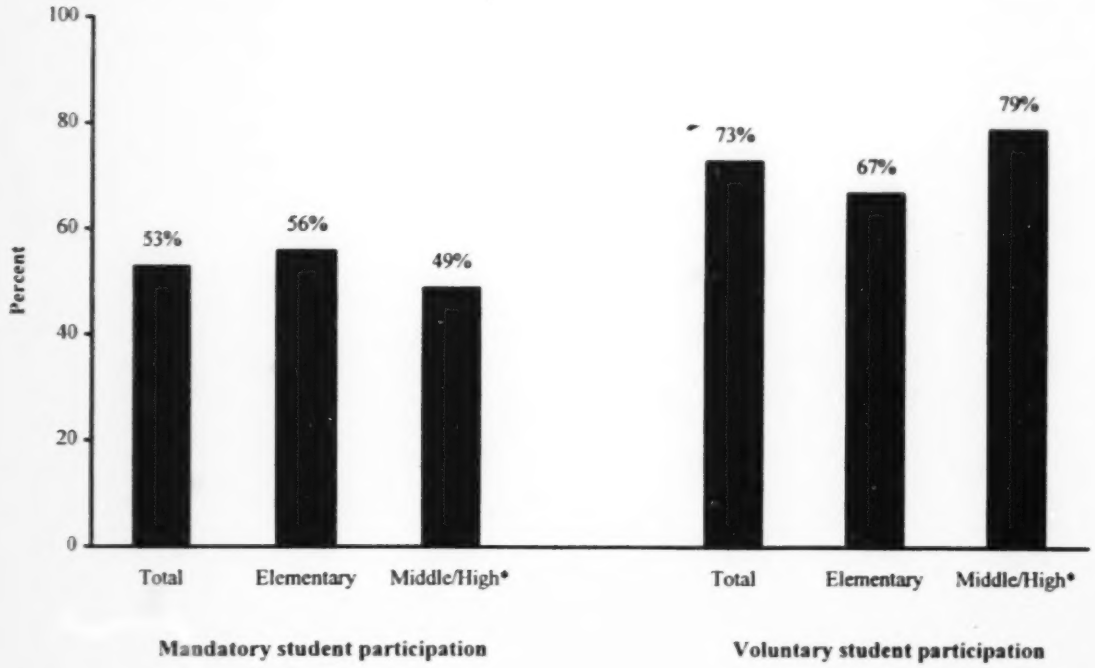
The ways schools implemented service-learning varied, to some extent, by whether the service-learning was voluntary or mandatory. In general, schools were more likely to make service-learning a voluntary choice for students than to mandate it (figure 1). When looking at mandatory participation and voluntary participation practices by instructional level, middle/high schools were more likely to make participation in service-learning voluntary. However, any difference that might exist at the elementary school level between mandatory and voluntary participation was not statistically significant.

Figure 1.—Percent of public schools with service-learning, by instructional level and mandatory or voluntary student participation: Academic year 1998-1999



*High schools include high schools and combined schools. Combined schools are schools that contain both elementary and secondary grades. The highest grade in these schools must be at least 9th grade.

NOTE: Data presented in the figure are based upon the number of schools having service-learning—32 percent of public schools. Percentage of schools reporting mandatory and voluntary student participation in service-learning do not sum to 100 because many schools had both mandatory and voluntary student participation in service-learning.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "National Student Service-Learning and Community Service Survey," FRSS 71, 1999.

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Types of Support for Teachers

Interest in involving students in service-learning has been accompanied by support being provided to teachers interested in integrating service-learning into their course curriculum. Nationwide, 83 percent of public schools with service-learning offered some type of support to teachers interested in integrating service-learning into the curriculum (table 3). The most common types of support provided to teachers included support for attending service-learning training or conferences outside of the school (66 percent), financial support for costs associated with service-learning projects or programs (58 percent), and mini-grants for service-learning programs or curriculum development (45 percent). However, smaller percentages of schools provided staff support in the form of part-time service-learning coordinators (18 percent) or full-time service-learning coordinators (3 percent).

Table 3.—Percent of public schools with service-learning that provide support to teachers interested in integrating service-learning into their course curriculum, by type of support provided: Academic year 1998-1999

Type of support provided	Percent providing support	
	Percent	Standard error
Any support	83	2.8
Support for attending service-learning training or conferences outside of the school	66	4.1
Financial support for costs associated with service-learning projects or programs	58	4.2
Mini-grants for service-learning program or curriculum development	45	3.7
Special recognition or awards for teachers using service-learning in their courses	29	3.4
Part-time Service-Learning Coordinator	18	2.7
Extra planning time for service-learning activities	15	2.5
Reduction in course load to allow time for service-learning program development or supervision	11	2.3
Full-time Service-Learning Coordinator	3	1.2
Other	3	1.3

NOTE: Data presented in this table are based upon the number of schools having service-learning—32 percent of public schools. Percentage of schools reporting that they provided support to teachers interested in integrating service-learning into their course curriculum do not sum to 100 because many schools reported providing more than one type of support.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS). "National Student Service-Learning and Community Service Survey," FRSS 71, 1999.

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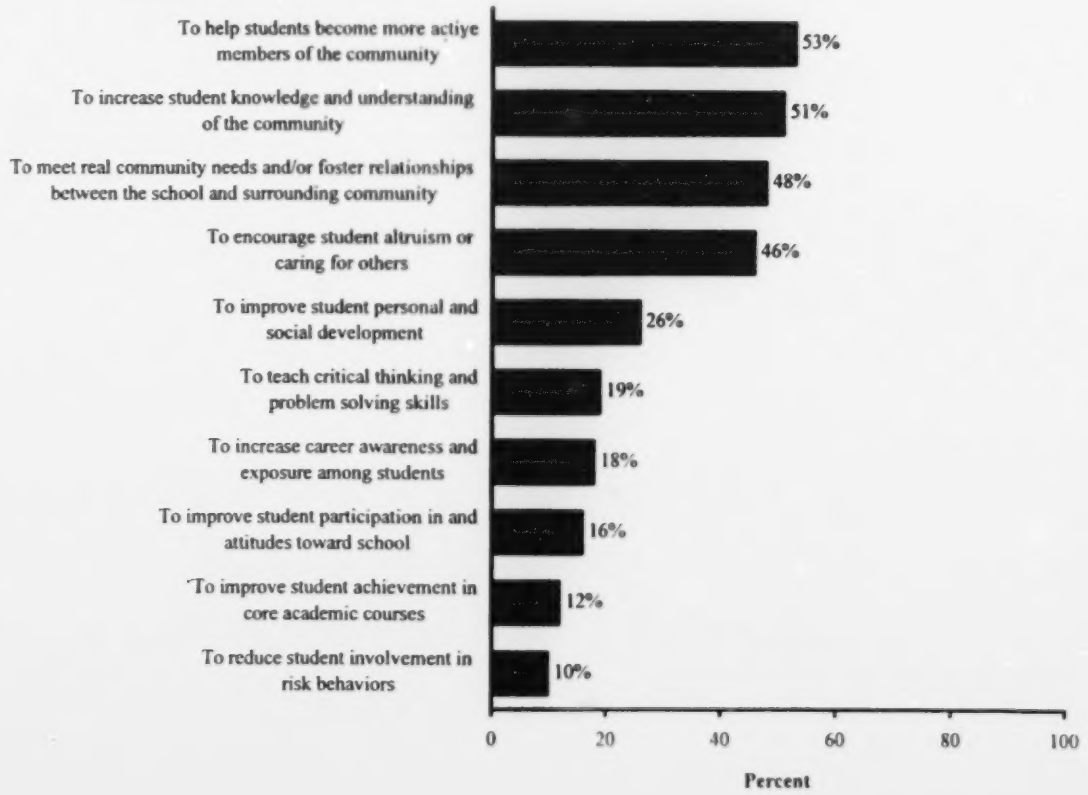
Why Service-Learning?

Public schools with service-learning were asked to select their three most important reasons for encouraging student involvement in service-learning from a list of ten potential reasons. These reasons ranged from increasing student knowledge and understanding of the community to improving student participation in school. The most frequently cited reasons for encouraging student involvement in service-learning focused on the relationships among students, the school, and the community. For example, 53 percent of schools said that they encouraged student involvement in service-learning to help students become more active members of the community (figure 2). The other most frequently cited reasons were increasing student knowledge and understanding of the community (51 percent), meeting real community needs and/or fostering relationships between the school and surrounding community (48 percent), and encouraging student altruism or caring for others (46 percent).

Figure 2.—Of public schools with service-learning, percent indicating that various reasons for encouraging student involvement in service-learning were among the most important: Academic year 1998-1999



NOTE: Data presented in this figure are based upon the number of schools having service-learning—32 percent of public schools. Percentages of schools citing reasons for encouraging student involvement in service-learning do not sum to 100 percent because schools selected their three most important reasons.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "National Student Service-Learning and Community Service Survey," FRSS 71, 1999.

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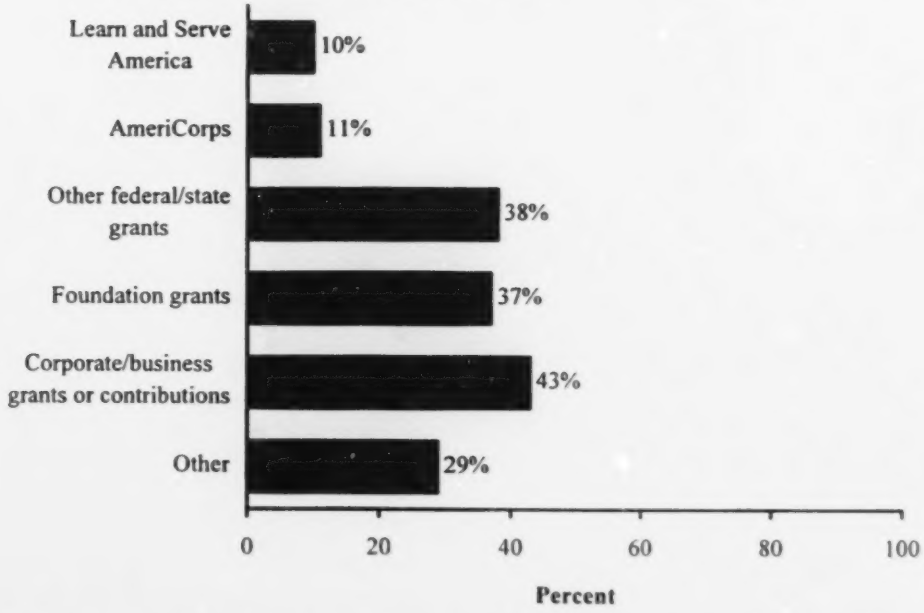
While involvement with the community is a key component of service-learning, it is only a part of the service-learning experience. The other side of service-learning emphasizes the connection between service and academics (figure 2). About one-fifth (19 percent) of schools with service-learning said that one of their top 3 reasons for encouraging student involvement in service-learning was to teach critical thinking and problem solving skills. In addition, 12 percent of schools with service-learning said that improving student achievement in core academic courses was one of their most important reasons for encouraging student involvement in service-learning.

Special Funding for Service Activities

All public schools were asked whether they received any special grants or other special funding to support community service and/or service-learning. Four-fifths of all schools (84 percent) that reported they had some level of service-learning and/or community-service also reported they did not receive outside financial help to fund the program(s). Of the 16 percent of schools that did report receiving special funding, 43 percent reported receiving support from corporations or businesses, and 37 percent reported receiving support from foundation grants (figure 3). Ten percent of schools receiving special support indicated that they received support through the Learn and Serve America program, a federal program designed to provide grants to schools interested in integrating service-learning into their curriculum.

Figure 3.—Of public schools receiving any special grants or other special funding to support service-learning and/or community service activities, percent receiving various sources of funding: Academic year 1998-1999



NOTE: Data presented in this figure are based upon the number of schools that reported receiving any special grants or other special funding to support service-learning or community services activities—16 percent of public schools. Percentage of schools reporting that they received special grants or special funding do not sum to 100 because many schools reported receiving special grants or special funding from more than one source.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "National Student Service-Learning and Community Service Survey," FRSS 71, 1999.

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Conclusion

The findings from the *National Student Service-Learning and Community Service Survey* indicate that community service and service-learning are rooted in the U.S. public elementary and secondary education system. The data suggest that there has been an increase in the percentage of public schools involving their students in community service activities, and much of this service is being integrated into the curriculum. For example, in 1984, 27 percent of all high schools were reported to have community service and 9 percent were reported to have service-learning (Newmann and Rutter, 1985). During the 1998-1999 academic year, these percentages were 83 percent and 46 percent, respectively (table 1). At the same time, the majority of schools with service-learning provided some support to teachers interested in integrating service-learning into their curriculum. Among schools with service-learning, the most frequently cited reasons for involving students in service-learning revolved around strengthening relations among students, the school, and the community.

While this brief uses some of the data from the FRSS study on school level service-learning to provide much needed basic information about the state of service-learning in our public schools, more analyses can and should come out of these data. For instance, while it is clear that many schools support service-learning to some degree, it is not clear how deep such support is. Detailed items from the study about the level of support for teacher service-learning training could help answer this question. Another issue that could be explored using these data deals with the subject areas in which service-learning is integrated. A third question that could be addressed is to what extent and in what capacity students are involved in selecting the service activities they will perform. Of course, this study cannot answer every important question about schools' and students' experiences with service-learning, suggesting the need for further studies. For example, it would be interesting to learn if schools that have initiated service-learning activities build on their early experiences by institutionalizing service-learning over time. Such a question and others examining changes in school's use of service-learning, student participation, support for teachers, and funding require research allowing analysis of changes across time.

Technical Notes

The sample of public schools for the Fast Response Survey System (FRSS) survey on service-learning and community service was selected from the 1996-1997 Common Core of Data (CCD) public school universe file. This was the most up-to-date file that was available at the time the sample was drawn. Over 79,000 regular schools were included in the CCD universe file, of which 49,000 were elementary schools, 15,000 were middle schools, and 16,000 were high schools or schools with combined elementary/secondary grades. For this survey, elementary, middle, and high schools (including combined schools) were selected. Special education, vocational education, and alternative schools were excluded from the survey along with schools that did not have at least first grade as their highest grade and those outside the 50 states and the District of Columbia.

FRSS surveys generally have relatively small sample sizes of no more than 2,000 schools. A stratified sample of 2,000 schools was selected for the survey on service-learning and community service. The sample was allocated to three instructional-level categories as follows: 200 elementary schools, 500 middle schools, and 1,300 secondary/combined schools. This sample design was developed based on feasibility calls and a survey pretest that indicated that few elementary schools had service-learning. This distribution of schools by instructional level was designed primarily to enable a relatively detailed analysis of secondary/combined schools where most service-learning was expected to occur. The much smaller samples of elementary and middle schools were intended to provide some limited information on the prevalence of service-learning and community service among these types of schools.

Within each instructional level, the specified sample sizes were allocated to "substrata" defined by type of locale (city, urban fringe, town, and rural) and size class in rough proportion to the aggregate square root of the enrollment of the schools in the substratum. The use of the square root of enrollment to determine the sample allocation gave greater selection probabilities to the larger schools within a given instructional level, and thus was expected to provide reasonably good sampling precision for estimates that are correlated with enrollment (e.g., the number of students in the school who are involved with service-learning or community service).

Prior to sample selection, schools in the FRSS frame were sorted by region (Northeast, Southeast, Central, West) within primary strata defined by instructional level (elementary, middle, secondary), type of locale, and enrollment size class (under 300, 300-499, 500-999, 1000-1499, 1500 or more). The specified number of schools was selected from each primary stratum with equal probabilities. Although the school sample was self-weighting within each primary stratum, the overall probabilities varied by instructional level and by size class within level.

The 3-page survey instrument was designed by Westat and NCES in collaboration with the Corporation for National Service and Alan Melchior of the Center for Human Resources, Brandeis University. The questions included on the survey addressed the policies and support for community service and service-learning in K-12 public schools. The survey began with a brief section on community service, including questions on whether students participated in community service activities, whether participation in these activities was required, and whether the school arranged community service opportunities. The majority of the survey, however, focused on service-learning. Specifically, the survey results provide reliable national data on:

- The percentage of public schools with service-learning activities,
- The percentage of students participating in service-learning activities,
- The percentage of school districts and schools with policies encouraging or requiring the integration of service-learning in the course curriculum,
- The ways in which schools are implementing service-learning and the specific academic subjects in which it is occurring,
- Support for teachers interested in integrating service-learning into their course curriculum,
- Public schools' main reasons for encouraging student involvement in service-learning activities, and
- Student participation in organizing and evaluating activities for service-learning.

The survey findings also provide reliable national estimates on sources of funding and volunteer participation in service-learning and community service activities taking place in K-12 public schools.

In March 1999, questionnaires were mailed to the principals in the 2,000 sampled schools. The principal was asked to forward the questionnaire to the person most knowledgeable about community service activities and service-learning at the school. Telephone followup of nonrespondents was initiated in mid-March, and data collection was completed in May. A total of 1,832 schools completed the survey, and 15 other schools were found to be outside the scope of the survey. Thus, the unweighted response rate was 92 percent (1,832 of the eligible 1,985 schools). The weighted response rate was 93 percent.

Survey responses were weighted to produce national estimates. For estimation purposes, sampling weights were attached to each school data record. The sampling weights reflect the schools' overall probabilities of selection and include upward adjustments to compensate for differential nonresponse. The findings in this report are estimates based on the sample selected

and, consequently, are subject to sampling variability. The standard error is a measure of the variability of estimates due to sampling. It indicates the variability of a sample estimate that would be obtained from all possible samples of a given design and size. Standard errors are used as a measure of the precision expected from a particular sample. If all possible samples were surveyed under similar conditions, intervals of 1.96 standard errors below to 1.96 standard errors above a particular statistic would include the true population parameter being estimated in about 95 percent of the samples. This is known as a 95 percent confidence interval. For example, the estimated percentage of public schools with service-learning is 32 percent, and the standard error is 2.0 percent. The 95 confidence interval for the statistic extends from 32 - (2.0 x 1.96) to 32 + (2.0 x 1.96), or from 28.1 percent to 35.9 percent.

To properly reflect the complex features of the sample design, standard errors of the survey-based estimates were calculated using jackknife replication. Under the jackknife replication approach, 50 subsamples or "replicates" were formed in a way that preserved the basic features of the full sample design. A set of estimation weights (referred to as "replicate weights") were then generated for each jackknife replicate. Using the full sample weights and the replicate weights, estimates of survey statistics were calculated for the full sample and each of the 50 jackknife replicates. The sum of the squared deviations of the replicate estimates then provided a measure of the variance (standard error) of the survey statistic. The relative standard errors (i.e., coefficients of variation) of estimates from this study ranged from 3 percent to 12 percent for most national estimates. These measures express the standard errors as a percentage of the estimates.

Standard errors for all of the estimates are presented in the tables. The standard errors for figures 1-3 follow the references. All specific comparative statements made in this report have been tested for statistical significance through chi-squared tests or t-tests adjusted for multiple comparisons using the Bonferroni adjustment and are significant at the .05 level or better.

The standard errors reported for some statistics in this report reflect design effects ranging from 1 to 5 or more. Design effects are an integral part of the standard error. They either inflate or attenuate the simple random sample standard error. For example, a design effect of 1.5 means that the variance of an estimate is 1.5 times the corresponding variance that would have been obtained from a simple random sample of the same size. Design effects vary by statistic and domain of analysis.

The large design effects of 5 or more generally applied to estimates for all levels combined and arose primarily from the use of the disproportionate allocation of the total sample to the three instructional levels. This allocation was based on the erroneous assumption that the prevalence of service-learning in elementary and middle schools was virtually nonexistent, and was intended to provide excellent representation of high schools where most service-learning was expected to occur, but only limited representation of elementary and middle schools. Variable sampling fractions within and across the three instructional levels also contributed to the total design effects.

The survey estimates are also subject to nonsampling errors that can arise because of nonobservation (nonresponse or noncoverage) errors, errors of reporting, and errors made in the collection of the data. These errors can sometimes bias the data. Nonsampling errors may include such problems as the differences in the respondents' interpretation of the meaning of the questions; memory effects; misrecording of responses; incorrect editing, coding, and data entry; differences related to the particular time and place the survey was conducted; or errors in data preparation. While general sampling theory can be used in part to determine how to estimate the sampling variability of a statistic, nonsampling errors are difficult to measure and, for measurement purposes, usually require that an experiment be conducted as part of the data collection procedures or that data external to the study be used. To minimize the potential for nonsampling errors, the survey was pretested with public school service-learning coordinators and other individuals knowledgeable about

service activities. During the survey design process and the survey pretest, an effort was made to check for consistency of interpretation of questions and to eliminate ambiguous terms as a result. As previously mentioned, however, there may have been some problems in the way schools interpreted the definitions of community service and service-learning. The questionnaire and instructions were extensively reviewed by the National Center for Education Statistics (NCES). Manual and machine editing of the questionnaire responses were conducted to check the data for accuracy and consistency. Cases with missing or inconsistent items were recontacted by telephone to resolve problems. Data were keyed with 100 percent verification.

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For a copy of the questionnaire, *National Student Service-Learning and Community Service Survey*, or for more information about the Fast Response Survey System, contact Bernie Greene, Project Officer, National Center for Education Statistics, 555 New Jersey Avenue, NW, Washington, DC, 20208-5651 or at 202-219-1366. This report and other NCES reports are available on the NCES web site at http://nces.ed.gov.

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Table 1a.—Standard errors for figure 1: Percent of public schools with service-learning, by instructional level and mandatory or voluntary student participation: Academic year 1998-1999

Type of student participation and instructional level	Percent	Standard error
Mandatory student participation		
All schools	53	3.7
Elementary	56	7.0
Middle/high*	49	2.2
Voluntary student participation		
All schools	73	4.1
Elementary	67	7.8
Middle/high*	79	1.9

*High schools include high schools and combined schools. Combined schools are schools that contain both elementary and secondary grades. The highest grade in these schools must be at least 9th grade.

NOTE: Data presented in the table are based upon the number of schools having service-learning—32 percent of public schools. Percentage of schools reporting mandatory and voluntary student participation in service-learning do not sum to 100 because many schools had both mandatory and voluntary student participation in service-learning.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "National Student Service-Learning and Community Service Survey," FRSS 71, 1999.

Table 2a.—Standard errors for figure 2: Of public schools with service-learning, percent indicating that various reasons for encouraging student involvement in service-learning were among the most important: Academic year 1998-1999

Reason	Percent choosing as one of the three most important reasons	
	Percent	Standard error
To help students become more active members of the community	53	3.6
To increase student knowledge and understanding of the community	51	4.1
To meet real community needs and/or foster relationships between the school and surrounding community	48	3.9
To encourage student altruism or caring for others	46	3.7
To improve student personal and social development	26	3.0
To teach critical thinking and problem solving skills	19	2.6
To increase career awareness and exposure among students	18	2.9
To improve student participation in and attitudes toward school	16	3.3
To improve student achievement in core academic courses	12	2.4
To reduce student involvement in risk behaviors	10	2.5

NOTE: Data presented in this table are based upon the number of schools having service-learning—32 percent of public schools. Percentages of schools citing reasons for encouraging student involvement in service-learning do not sum to 100 percent because schools selected their three most important reasons.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "National Student Service-Learning and Community Service Survey," FRSS 71, 1999.

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Table 3a.—Standard errors for figure 3: Of public schools receiving any special grants or other special funding to support service-learning and/or community service activities, percent receiving various sources of funding: Academic year 1998-1999

Source of special grants or special funding	Percent	Standard error
Learn and Serve America	10	2.1
AmeriCorps	11	3.1
Other federal/state grants	38	4.5
Foundation grants	37	4.5
Corporate/business grants or contributions	43	6.6
Other	29	5.1

NOTE: Data presented in this table are based upon the number of schools that reported receiving any special grants or other special funding to support service-learning or community services activities—16 percent of public schools. Percentage of schools reporting that they received special grants or special funding do not sum to 100 because many schools reported receiving special grants or special funding from more than one source.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "National Student Service-Learning and Community Service Survey," FRSS 71, 1999.

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